	r ID 100615 124, 2013 12:42:1			*100	1615*							Page 1	
Item ID: Revision ID:	D3190-1			Accept	*N90	0040	100)*	Setup S		*N:	S1*	
	Chafing Shield 4/24/2013 Star	et Qty: 10.00	*10*		Cust Iter	n ID·			3	top	*N:	S2*	
Required Date: 4 Reference:		'd Qty: 10.00	*10*		Custome								
Approvals:	Process Plan:	Ø	Date: 13-14-24	/ Tooling:		Date:		-		tart	*N	R1*	
	QC:	<u> </u>	Date:			Date:			S	top	*N	R2*	
Sequence ID/ Work Center ID		ration ription		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty		Reject Iumber	Insp. Stamp	_
Draw Nbr	Revision N	Nbr		•	,								
D3190	Rev A	I				:							
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100 Waterjet		Memo		0.00	-		•	13			Æ	JMB-5.	· 27
FLOW CNC Waterje	t ·	CUT AS PE DWG REV			•	-							
304,020	,	DWG REV PROG REV	;	٠				' 'C,				\cap	
USE	20,025											170 -	
105	P13/5/22-	Inspect parts off m	nachine FAI/FAIB	0.00	•							170 -	
<u>*</u> 105*	70,00			0.00					_ 0		_&_	JM13-5-	53
QC Quality Control		Memo		0.00	.								
106	QC8-	Inspect parts - sec	ond check	۵.00 o.00	3			13					
106		Memo		0.00 BSJ	7			17				Alternative statements	

Quality Control

										DQA:	Date	:	
NCR: Y	es / No				WORK ORDER NON-	100	NFOR	MANCE / UP	DATE	OA Classel	Data		
										QA Closed:	Date	<u>: </u>	
Work Orde	r: 100	261			DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		•
					Rework	7		Skid-tube	Crosstube		Water Jet	7 Engi	ineering
Part N	lo. D =	3190	- 1		Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	1	Quality
		•	,		Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging]	Other 🗌
NCR N	lo				Work Order Update			Large Fab	Composite		Supplier	_	
						اا					T		
Root	-				ption of work order update		nitial	1	tion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	<u> Q</u> (C Inspector
Doc/Data							0						
Equip/Tooling] 13/5/h7	IDD)	1 USE	24 GA material and of 25 GA. SON 5 25 GA		1//	Accordit	10		,		
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опаррточео	<u> </u>	I				AUL	T CATE	GORY		<u> </u>	<u> </u>		
Landin	ng Gear	-	 -		General								
Γ	Bending			Γ	Bend		Grain			Ovalized	Γ	Pressu	re/Forced
<u> </u>	Centre N	ot Concei	ntric to	o/s \vdash	BOM/Route		Hardwa	re		Over/Under	tolerance	⊣	erature/Cure
	Cracks			·	Broken/Damaged	\vdash	İ	ion Incomplete		Part Incorre	—	Weld	

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Wrong Stock Pulled

Other

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

120

Identify as per dwg & Stock Location: L653 0.00

120 Packaging

Packaging Memo
Packaging

0.00

13 Ø Ø

13-5-30

											DQA:	Date	e:
NCR: Y	es /	No				WORK ORDER NON-C	100	NFORI	MANCE / UPDATE		•		
											QA Closed:	Date	2:
Work Orde	or.					DISPOSITION			AGAINS ⁻	T DE	PARTMENT	PROCESS	
Part No. NCR No.					Rework Scrap Use-as-is Work Order Update	Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite			4	Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other		
Root					Descri	ption of work order update	1	nitial	Action		Sign &		
Cause	D	ate	Step	Qty		or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
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	Ben	ding			<u> </u>	Bend		Grain		\perp	Ovalized	L	Pressure/Forced
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	Cra	cks				Broken/Damaged	L	Inspecti	on Incomplete	L	Part Incorrec	t L	Weld
	Cru	shed/C	rimped			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mis	ssing	Wrong Stock Pulled
	Cuf	fs				Contamination		Mainte	nance		Part Moved		
	Hea	t Treat	:			Countersink		Mislabe	led		Positioned W	/rong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

0.00

Memo

QC

Quality Control

										נ	QA:	Da	te:	
NCR: Y	es / N	o			WORK ORDER NON-	COI	NFOR	MANCE / UP	DATE				-	***
										QA Clo	sed:	. Da	te:	
Work Orde	àr.				DISPOSITION				AGAINST DE	PARTN	IENT	/PROCESS		
WOIR OIG					Rework	7		Skid-tube	Crosstube	1		Water Jet	\Box	Engineering
Part N	lo.				Scrap	1		Machining	Small Fab		Pro	d. Eng. Coor.	-	Quality
					Use-as-is		Thern	noforming	Finishing	Rec	/Sto	re/Packaging		Other
NCR N	10				Work Order Update]		Large Fab	Composite]		Supplier		
Root	1	1	T	Descri	ption of work order update	Τ	Initial	Ac	tion	Sign	&		\neg	***
Cause	Da	e Step	Qty	1	or Non-conformance	Cr	nief Eng	Desc	cription	Dat		Verification	n	QC Inspector
Doc/Data							,							
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	Bend	ng			Bend		Grain			Ovalize	d			Pressure/Forced
	Centr	Not Conce	entric to	o/s	BOM/Route		Hardwa	re		Over/U	nder	tolerance		Temperature/Cure
	Crack	;			Broken/Damaged		Inspecti	on Incomplete		Part Inc	orre	ct [Weld
	Crush	ed/Crimped	l		Burrs	Г	Instruct	ions Incomplete/	Unclear	Part Lo	st/Mi	issing		Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance		Part Mo	oved	•		
	Heat	reat			Countersink	Г	Mislabe	led		Position	ned V	Vrong		
	Inspe	tion Strip in	n Tube		Cut Too Short	Г	Misread	I		Power	Loss/	Surge	\Box	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

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Picklist Print

Wednesday, April 24, 2013 12:42:21 PM

Work Order ID: 100615

100615

Parent Item:

D3190-1

D3190-1

Parent Item Name: Chafing Shield

Start Date: 4/24/2013

Required Date: 4/29/2013

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP A03.05.26New issueKJ/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S25GA 24		Purchased	No			100	sf	0.0000	0.2153	2:266316			/
M304525	GA								**	2.3.		AU/	JMB-5-27

B125552

125552

NCR:	Yes	1	No
IXC.IX.	163	•	110

NCR: Y	es / No				WORK ORDER NON-C	CON	FORM	// ANCE / UP	DATE			
	,									QA Closed:	Date:	
Work Orde	r:				DISPOSITION				AGAINST DI	EPARTMENT,	PROCESS	
					Rework			Skid-tube	Crosstube]	Water Jet	Engineering
Part N	О.				Scrap		ľ	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
		<u>-</u>			Use-as-is		Thermoforming Finishir			Rec/Stor	e/Packaging	Other
NCR N	o		<u>.</u> —		Work Order Update	Large Fab Composite			Composite	_	Supplier	J L
Root				Descri	ption of work order update	Ir	nitial	Ac	tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chi	ef Eng	Desc	ription	Date	Verification	QC Inspector
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quip/Tooling												
Operator												
Material												
Setup						1						
Other			·			1						
Process												
Supplier	_											
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						AUL1	CATE	GORY			·	
Landir	ng Gear			_	General				_	7	_	, , <u>,</u>
ļ	Bending				Bend	Щ	Grain		_	Ovalized	<u> </u>	Pressure/Forced
1	Centre No	ot Conce	ntric to	o/s	BOM/Route	\mathbf{H}	Hardwa			Over/Under	 	Temperature/Cure
	Cracks				Broken/Damaged	-	•	on Incomplete		Part Incorred	}	Weld
	Crushed/	'Crimped		<u> </u>	Burrs			ions Incomplete/	'Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs			L	Contamination		Mainte	nance		Part Moved		
	Heat Trea	at		<u> </u>	Countersink	Ш	Mislabe	led		Positioned V	/rong	, '
[Inspectio	n Strip in	Tube		Cut Too Short	Ш	Misread	l		Power Loss/	Surge	Other
	Ripples in	n Bend			Drill Holes		Offset					
	Torque V	Vaves in I	Extrusio	n [Drawing		Out of C	Calibration				
	Turning S	Sequence	!		Finish		Out of S	iequence				
	Wave/Tw	vist in Tul	be		Folio	Outside Dimensions						

DQA: _____ Date: ____

DART AEROSPACE LTD	Work Order: 1006	2
Description: Charing shield	Part Number: 13190	- 1
Inspection Dwg: \(\Omega_{3/90} \) Rev: \(A \)	Page	1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments						
9.25"	3.130 -11-003	9,263"			V	Produtor						
3.13"	3.130 41-0.03	3.130"	~		V	·						
0.020"	4/0000	0024"	_		V	Thro;						
						,						
	,											
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				4								

Measured by: Jm //te	Audited by:	22	Preliminary Approval:	-
Date: 3-5-27.	Date:	13527	Date:	

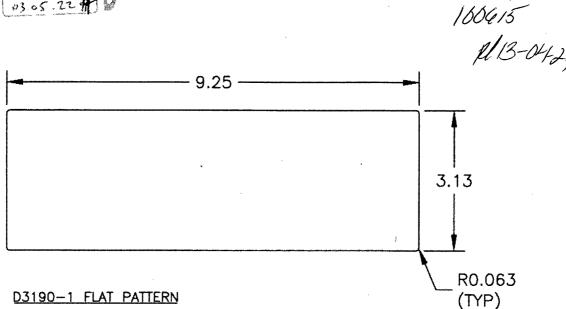
Rev	Date	Change	Revised by	Approved
Ε	10.04.14	Added preliminary approval	KJ	

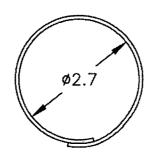
\$ 10.04.15





DESIGN	DRAWN BY	DART AEROSP HAWKESBURY, ONTAR	
CHECKED	APPROVED	DRAWING NO.	REV. A
DATE		TIME	SHEET 1 OF 1
03.05.16		CHAFING SHIELD	1:2
Α	03.05.16	NEW ISSUE	





D3190-1 ROLLING DETAIL NOT TO SCALE

D3190-1 CHAFING SHIELD

- 1) MATERIAL: AISI 304/316 SS 0.020" THICK (REF. DART SPEC M304S25GA)
- 2) FINISH: NONE
- 3) DEBURR/BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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										DQA:	Date:	
NCR: Ye	es / No	egg;			WORK ORDER NON-	CON	FORM	MANCE / UP	DATE	QA Closed:	Date:	
Vork Order:			4	The state of the s	DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No	o				Rework Scrap		1	Skid-tube Machining	Crosstube Small Fab	┥	Water Jet d. Eng. Coor.	Engineering Quality
NCR No	0				Use-as-is Work Order Update]		oforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					ption of work order update		itial		tion	Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Chie	ef Eng	Desci	ription	Date	Verification	QC Inspector
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Landin	g Gear				General							_
•	Bending				Bend	П	Grain			Ovalized		Pressure/Forced
٠. 🗖	Centre Not Concentric to O/S			o/s	BOM/Route	П	Hardware			Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspection Incomplete			Part Incorre	ct	Weld
.	Crushed/Crimped				Burrs		Instructions Incomplete/Unclear			Part Lost/Mi	issing	Wrong Stock Pulled
2.7 1. 1.4	Cuffs				Contamination		Maintenance			Part Moved		
	Heat Treat				Countersink		Mislabeled			Positioned Wrong		
	Inspection Strip in Tube				Cut Too Short	⊢⊣	Misread			Power Loss/	Surge	Other
t	Ripples in Bend				Drill Holes	\Box	Offset			_		
ŀ	_ ``	orque Waves in Extrusion			Drawing	\vdash	Out of Calibration					

Out of Sequence
Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish